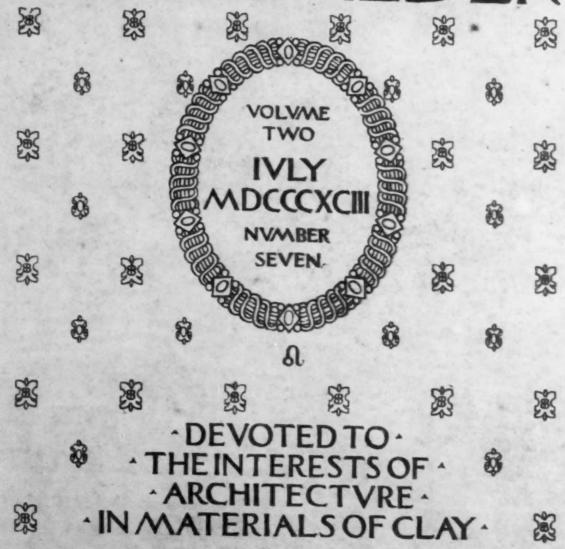
# \* THE \* BRICKBYILDER



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Vol. II.

BOSTON, JULY, 1893.

No. 7

# BRICKWORK AND FAIENCE AT THE FAIR.

GEORGE M. R. TWOSE, Chicago.

THE main buildings of the Fair, in their majesty and beauty, are more apt to dazzle the eyes of the seeker after brickwork with the white halo that emanates from them, than to give him assistance by rendering the few monuments reared with the products of the potter's art more prominent by their position within the influence of this white glory.

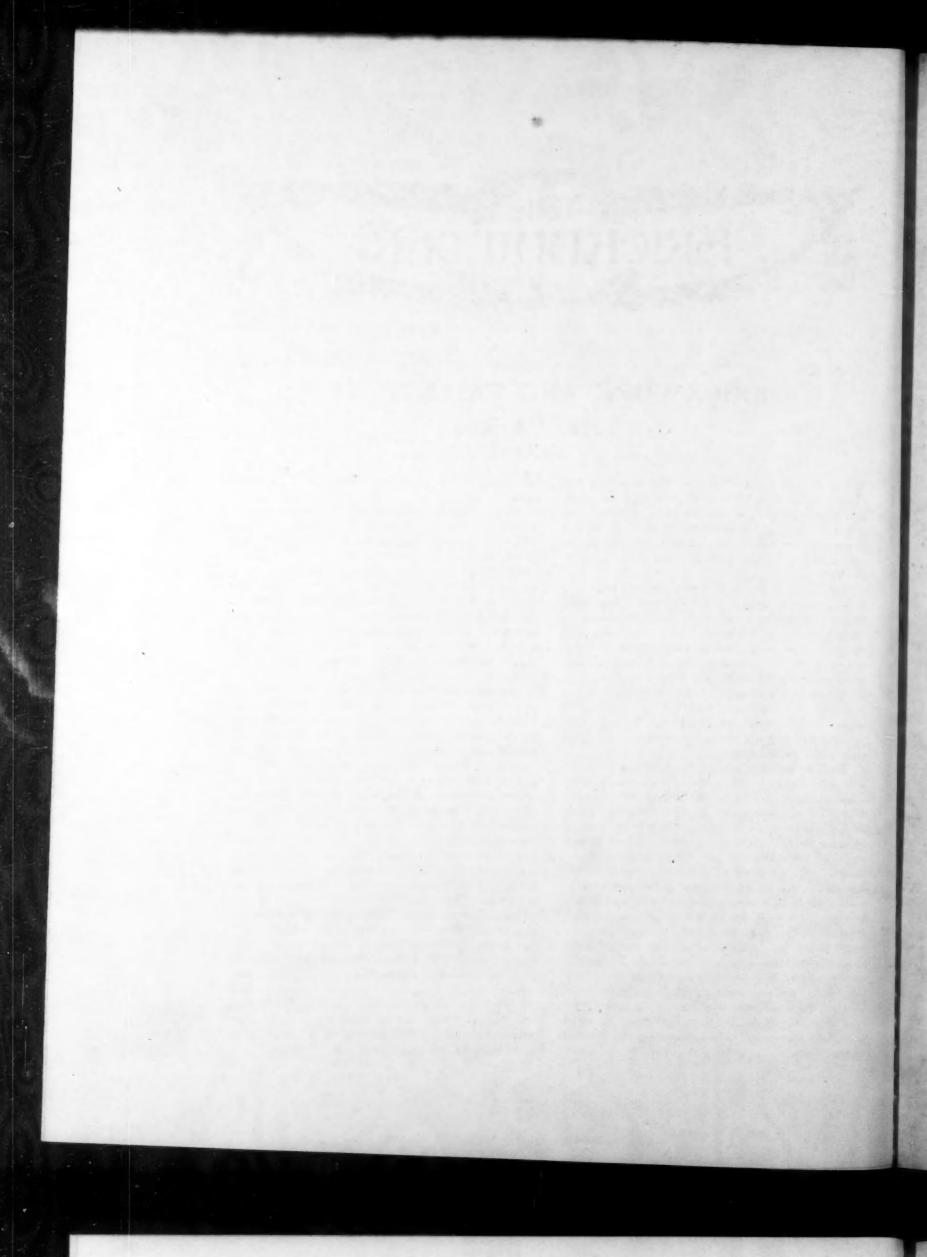
Yet to whomsoever seeks comes the knowledge that those rectangular prisms of clay play a most important, although retiring, part among the materials composing this ephemeral city; for, to select from their many uses, they are silently guarding, behind a mask of staff, the treasures of the art palace from the ruin the unopposed elements would quickly inflict, supporting without a quiver, through the massive strength of their combined hundreds of thousands, the powerful throbs of the mighty Allis engine and, at the other end of their range, forming, under the judiciously disposing hand of the architect, buildings of great quaintness and interest.

These are but a few examples to cheer those interested with fresh conviction of the vast area of use that exists for brickwork, while over on the lake front of the exposition there is a most humorous and novel substitution of bricks for the materials used heretofore, which would seem to open the limitless plains of the sea to the evangelizing energy of THE BRICKBUILDER. This best thing in new departures that the World's Fair has to offer is the battleship Illinois, which is a fine piece of architecture, scarcely needing the distinguishing adjective "naval" usually prefixed in classifying structures of this sort; for, though it is not so widely appreciated as it should be, this white and stately vessel, lying with equal calmness on the stormagitated or the breeze-rippled surface of Lake Michigan, is constructed entirely of brickwork beneath its armor plating of staff. It is presumably to this fact that its steadiness and the consequent jauntiness of the crowds that tread its decks are due. A similar steadiness in any of the Atlantic liners would insure a fortune-giving popularty, which would seem to make this new idea well worth developing, pro bono publico and incidentally of the brick trade.

To turn from the problematical to the better demonstrated uses of brickwork, we find, close to the northeast end of the Liberal Arts Building, a representation of a Dutch cocoa house erected by Messrs. Van Houten & Zoon of Holland, for the purpose of displaying their wares, which they do in the most charming manner, the main part of the house being occupied by five delightfully designed rooms of varying Dutch character, furnished with tables and seats whereat they who wish it are served with the firm's cocoa, the consumption of which gives a grateful period of rest, rendered still more pleasant by the view of the lake just across the road.

Although the actual construction of the building is only lath and plaster painted to imitate brickwork, it is so faithfully done that the deception passes almost unnoticed by the general spectator, and, if observed, its location in that park of illusive appearances shields it from the scorn it might evoke amid other surroundings. The design is modelled on the style current in Holland in the seventeenth century, which period is also reflected in the interior of the room on the left-hand side of the east entrance, the door of which bears the date 1634; while on the walls is a dado of Dutch tiles of the same age taken from an old house in Holland. This tile dado is one of the most charming features of the place and is a beautiful example of the application of this form of clay to interior decoration. The effect of the blue-and-white tone is very pleasing, being evenly distributed by the repetition of the tiles, and the similar arrangement of the designs, which are all most childlike conceptions and representations of biblical scenes and incidents. The exterior material is brick and terra-cotta, and the whole effect is one of life and character.

Seen from the east, Messrs. Van Houten & Zoon's house suffers greatly from its juxtaposition to the huge masses of the Liberal Arts Building, which imposes upon it the effect of being something done in miniature, or



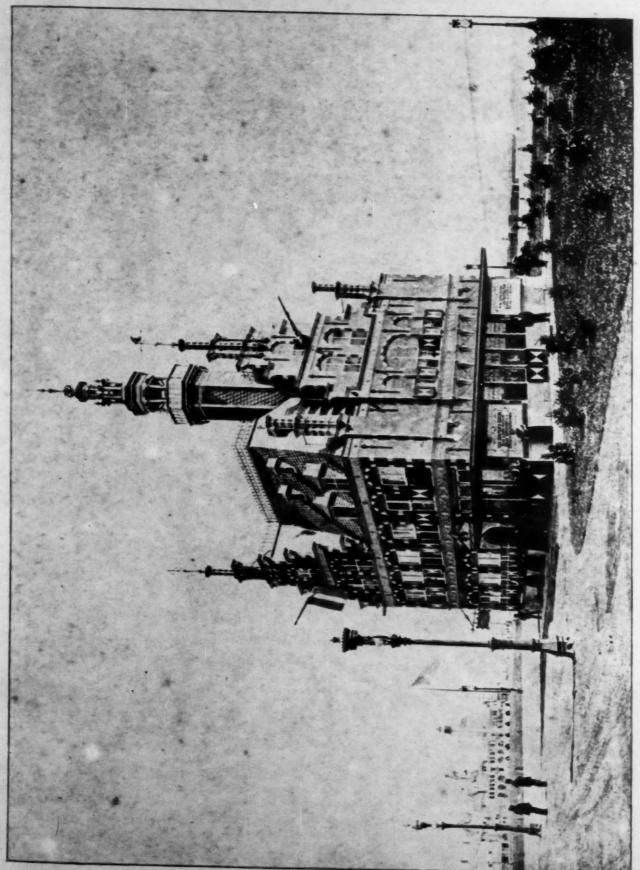


EXHIBIT OF C. J. VAN HOUTEN A ZOON, COCOA MANUFACTURERS, WORLD'S COLUMBIAN EXPOSITION.



a scale reduction, so small does the adjacent pile make it appear.

This wears off on investigation, and the mind is completely reassured on finding, by measurement, that the bricks are of normal size, though curiously enough laid in English bond instead of Flemish, as one would expect. The west and east fronts, which are similar, are a trifle wanting in quietness and mass on account of the lack of wall space occasioned by the demand for many and large windows in the public rooms. The window openings themselves are very well treated, and are remarkable for

the strength of the effect that has been produced with only a four-inch reveal emphasized by a flat Ogee mould round the entire opening; while the arrangement of sash and tympana is a very successful solution of the difficulty attending the association of the domestic window frame with a curved or pointed arch, and is well worthy of adoption by designers in brickwork.

The coloring is a trifle unfortunate, appearing a little too dark, though this, being probably due to the effect on the eye of the white buildings, might not be considered so among other surroundings; and as a whole the building is interesting and pleasant to gaze upon, full of a variety that never descends to fussiness, well grouped, and evincing, in its general impress of great good

taste, that it is the work of a scholarly and refined mind. The entire structure was prepared in Holland, and it is interesting to note the thoroughness of the visible construction, as shown by the frequent and heavy wroughtiron anchors and the terra-cotta and stone blocks which tie back all projecting planes to the main hall.

The entire cost was \$65,000 (inclusive of the elaborate interior fittings and furniture), and the building, which is now in bond, will be probably returned to Antwerp, "leaving not a wrack behind," except in the minds of the people (10,000 a day) who are equally refreshed

by its cocoa and its atmosphere of quaintness and of easy moving existence. M. Guillaume Wymen of Antwerp, the architect, is to be highly congratulated on his interesting and nationally characteristic edifice.

The general display of art tiles in the exhibition is very inclusive, and presents many points of interest, from the porcelain of the Royal Berlin factory, the blue beauty of the Delft ware, and the interesting English exhibit, down to but not including some detestable slabs which are designed and marked to imitate mosiac tesserie. Tile flooring has sufficient capability for beauty of its own

EXHIBIT OF THE NORTHWESTERN TERRA-COTTA COMPANY.

to make such borrowing of false appearances a quite unnecessary and regretable thing. The English exhibit especially indicates to what a great degree faience has usurped the place of all previously used materials, in that country. for the interior decoration of clubs, hotels, restaurants, and other buildings of like public character, while even on the steamboats of the Atlantic and Orient lines it is being extensively used: its use. primarily confined to bath and toilet rooms, now being extended to smoking-rooms and other portions of the boats. The principal reason for this is, of course, the ease and guickness with which it may be cleaned, wherein lies its great advantage over other materials, as is conclusively shown in the big London clubs; for, while in the days of paint

and paper redecoration was an annual necessity, and period of horror, during which the club was uninhabitable and its members obliged to seek the hospitality of other similar institutions, the ease and quickness with which walls, ceilings, and floors are now restored to their pristine freshness provide a condition of greater general cleanliness and render unnecessary the invasion of the painter and paperhanger; and the club consequently is not obliged to impose upon its members the necessity of going elsewhere during certain periods.

In hotels also, of course, this quality is greatly appre-



ciated, and with such beauty and such virtues the material has achieved the greatest popularity across the water. The general conditions which make it thus widely used abroad are the same as those which rule in America; and although marble is a new factor, yet with activity on the part of the tile manufacturers and the improvements that would ensue therefrom, developments may be looked for in this country similar to those which have occurred

on the other side of the Atlantic. These individual exhibits will be treated at greater length in future papers, but meanwhile visitors may feel assured that this particular branch of the Liberal Arts is well worth a visit.

On the shores of the south basin, in the French colonies group, the Tonkin palace has many interesting articles of the same description. These clever people, with whom the art is a very old one, use it for a great variety of purposes, the palace in question having a most magnificent ridge and roof of colored faience. Inside are seats and stools of the same material, while a curious parallel to the perforated stone tracery, found early in the history of windows prior to the general use of glass, is to be seen in the tiles of open design which are used for the same purpose.

The exhibit of the Northwestern Terra-Cotta Works, of Chicago, Ill., is to be found in the northwest corner of the Liberal Arts, and is a splendid example of the astonishing pitch of perfection to which this manufacture has been wrought. The main object is a pavilion designed especially for the exposition by Mr. Arthur Heun, and the sharpness and delicacy of the execution of the ornament and mouldings are things to see and admire. The main outline of the structure is Gothic, of a transitional period which allows of the legitimate introduction of both Gothic and Renaissance detail; both are admirable in design and in execution, and the variety of the surface treatment inside and out makes an ensemble which claims a long and pleasant period of examination. The building, which

is admirably adapted for the exhibition of all kinds of ornament, and is also charming taken as a whole, should do much to popularize and spread the use of terra-cotta as an architectural feature, in showing, as it does, the capabilities of the material and its great quality of receiving and recording even the lightest artistic impress. In the richness of these few acres there is much to mark and learn; and from the beauty of it all may greater beauty rise!

TERRA-COTTA AND FAIENCE AS MATERIALS
FOR ARCHITECTURAL AND DECORATIVE APPLICATION.

(Continued from June number.)

On the general question of the application of terracotta, may I now be permitted to make a few practical remarks? I noticed that your esteemed president, in his

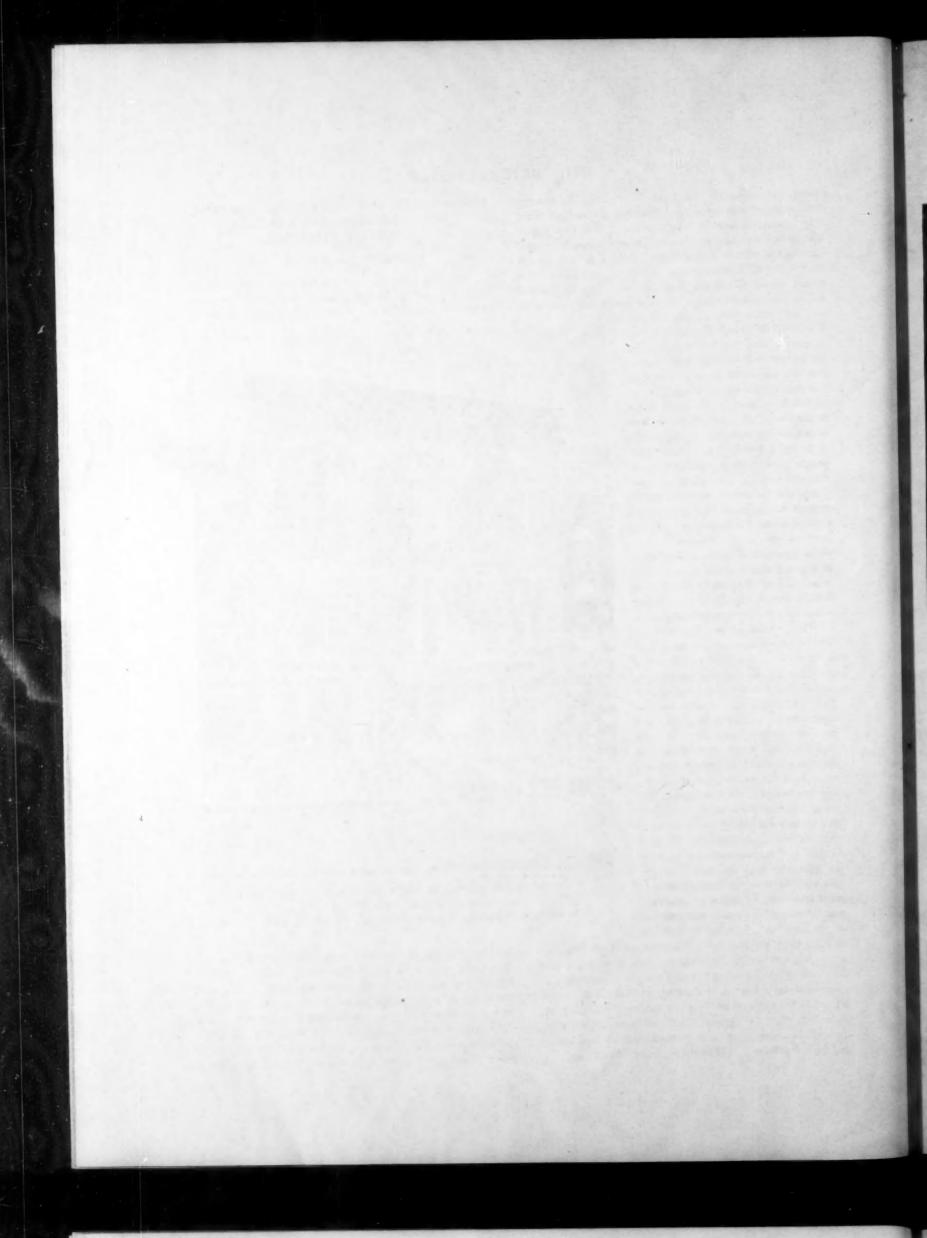


LEGION OF HONOR BUILDING, HUNTINGTON AVENUE, BOSTON.

ROSCH & TILDEN, ARCHITECTS, BOSTON.

Terra-cotta by the Perth Amboy Terra-Cotta Company (Waldo Bros., Agents).

opening address, alluded to the objections to the use of terra-cotta, caused by its liability to shrinkage, and to the twisting, etc., of lines that should be rigid, caused in this way, and there can be no doubt that in these remarks he has spoken from extensive practical experience, and yet I venture to say that, if he would add yet further to his experience, taking due precaution in the matter, he would require no other arguments to convince him that





ENGRASED BY THE FRANKLIN ENGRAVING CO , BOSTON.

PORTION OF FRIEZE, HARTFORD, CONN., SAVINGS BANK.

PEABODY & STEARNS, ARCHITECTS, BOSTON.

Executed by the Perth Amboy Terra-Cotta Company.

the qualities he ascribes to terra-cotta do not necessarily pertain to the material, and are characteristic only of a bad form of it. No doubt there are, unfortunately, notable

instances of bad terra-cotta, as there are of bad materials of almost any description; but there are also some instances exactly the reverse. This much can be said for terra-cotta: that every year increases the knowledge, skill and appliances brought to bear in its production, and as trained and skilled workmanship is brought to bear with improved processes, the quality of the work must improve in the respect in which I am bound to say it has been, and is still, sometimes very deficient. As a material, it has too often been resorted to by architects for its supposed cheapness, and too often it has not been the best make by the best makers, but the cheapest make by the lowest-priced maker, that has been adopted. By this standard, terra-cotta work has been judged and found guilty, whereas there is no material in which there is greater margin for skill and superiority of treatment or for inefficiency and failure. I hesitate to say what I have known of the miserable shifts by which terracotta is sometimes turned out to meet the demand of the lowest possible price as the alternative of the greatest possible excellence, and there is little wonder that such terracotta is unsatisfactory.

Another objection to the use of terra-cotta, and one in which I feel there has been and is still some force, is that it is slow of production. There is no doubt that it does take more time than some forms of material for its satisfactory production, and there is no doubt also that its extensive use in a structure has sometimes caused a somewhat slower erection than has been desirable either in the interests of the builder or the owner. There is no doubt also that in such an event the terra-cotta manufacturer gets the full benefit of any irritation caused by the delay, nor will I say he is always wholly innocent, but the remedy for such a condition of things is often very obvious. It is often traceable to the supply being intrusted to a producer with an insufficient plant, and at a price that will never enable him to pay for any addition to it. He is no doubt to blame for taking more work than he can execute, but perhaps he is slack at the time and sanguine, and does his best, but if he is not in a position to start fair with his work at the first, woe be to him if he has a heavy job on hand.

The only satisfactory method in terra-cotta work is to anticipate, as far as possible, the progress of the structure, and this can only be done in the first instance by the architect making the terra-cotta the subject of special estimate as far as practicable ahead of the general work. This is now indeed almost the general rule, and it has many advantages. It brings the architect into direct con-



ENGRAPSE BY THE PRANKLIN ENGRAPING CO., BOSTON

PORTION OF FRIEZE, HARTFORD, CONN., SAVINGS BANK.

PEABODY & STEARNS, ARCHITECTS, BOSTON. Executed by the Perth Amboy Terra-Cotta Company.



tact with the producers, and they are in a better position to understand and follow his special requirements. The margin for variation in the general estimate is reduced, and the builder at once knows the amount he has to



DETAIL FROM POPE BUILDING, BOSTON,
PEABODY & STEARNS, ARCHITECTS. Executed by the Perth Amboy TerraCotta Company (Waldo Bros., New England Agents).

include for items, which are often a source of perplexity, and with respect to which there is sometimes such wide differences of price as possibly to prejudice one way or the other the general estimate.

The delay in getting out working drawings is also not infrequently a source of hindrance, and if an architect

has failed to realize the necessity of being well ahead with them, it is much less easy for a terra-cotta producer to arrange and set out his work in which, more than in any other mate rial, it is of importance to see the way

through from beginning to end, as far as possible from the first step.

It has also happened that difficulties have arisen in carrying out working designs. Comparatively few architects or draughtsmen have had very extensive experience in working out terra-cotta drawings; and although, of course, principles of construction apply in all cases, yet terra-cotta cannot be treated altogether as stone. The form and size of blocks, the bond, the key of the joints, mouldings, etc., require some special consideration if the work is to be carried out to the best advantage. It is not an unknown thing for a producer to struggle with a badly conceived working drawing, and so cause serious delay and inconvenience, instead of at once pointing out the practical difficulties, and suggesting an efficient remedy, which might be adopted without prejudice to the constructional lines of the design; yet I venture to believe there are few architects who would not at once recognize and adopt any really intelligent suggestion thus offered, when clear from any ulterior object. Nor will I say that the terracotta producer has always succeeded in getting the best talent necessary for his work: it is a work to which comparatively few men have been actually trained. For its successful management many good qualities are essential, and to carry out any important work in terra-cotta, there

must be constructive skill sufficient correctly to read, and correct if need be, in relation to other parts, any working drawing. In not a few cases it is the doubtful privilege of the terra-cotta manufacturer to make the working drawings. For this are required the thorough practical training of a mason and the constructive skill of a draughtsman. There must be a practical knowledge of the material, and the best mode of treatment; sound judgment as to what can and cannot be successfully done; perception sufficiently acute to take in the idea of the architect, or any novel point of treatment; artistic taste enough to insure thoroughly good modelling of all enriched or decorative parts; and sufficient science and practical skill to secure the most perfect system of burning adapted to particular material used. It is not surprising that a producer should sometimes break down on some of these points, in the absence of men specially and technically trained. I am, however, glad to believe that this is a point in which considerable progress is now being made, and, should the use of terracotta become still more general, it will be far more easy for producers to meet enlarged demands than it has been in the past, when, unfortunately for themselves, and

sometimes for their clients, their attempts to meet extraordinary demands have, in not a few instances, resulted in spasmodic effort and corresponding disappointment.

The Building News.

(Concluded.)



ENGRAVED BY THE FRANKLIN ENGRAVING CO., BOSTON

DETAIL FROM POPE BUILDING, BOSTON. PEABODY & STEARNS, ARCHITECTS, Executed by the Perth Amboy Terra-Cotta Company (Waldo Bros., New England Agents).



DETAIL FROM POPE BUILDING, BOSTON.

PEABODY & STEARNS, ARCHITECTS. Executed by the Perth Amboy Terra-Cotta Company (Waldo Bros., New England Agents).

### CORRESPONDENTS WANTED.

A correspondent for THE BRICKBUILDER is wanted in every city and town in the United States to keep us posted on everything of interest to our readers. For full information as to what will be required and the remuneration address the editor, P. O. Box 3282, Boston.



# THE BRICKBUILDER.

AN ILLUSTRATED MONTHLY DEVOTED TO THE ADVANCE-MENT OF ARCHITECTURE IN MATERIALS OF CLAY.

PUBLISHED BY

## The Brickbuilder Publishing Company,

4 LIBERTY SQUARE, BOSTON.

P. O. BOX, 1/82

Subscription	price, 1	nailed	flat to	subsc	ribers	in	the	Unit	ed	
	States	and	Canada					4. 1		\$2.50 per year
Single numb	ers				-				-	25 cents
To countries	in the l	ostal	Union			10				\$3.00 per year

COPPRISHT, 1843, BY THE DEICKBUILDER PUBLISHING COMPANY,

Entered at the Boston, Mass., Post Office as Second Class Mail Matter, March 12, 1892.

THE BRICKBUILDER is for sale by all News lealers in the United States and Canada. Trade Supplied by the American News Co. and its branches.

### PUBLISHERS' STATEMENT.

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DETAIL FROM POPE BUILDING, BOSTON.
PEABODY & STEAKNS, ARCHITECTS. Executed by the Perth Amboy TerraCotta Company (Waldo Bros., New England Agents).

WE have frequently had trouble in convincing brickmakers that we were advancing their interests by a general advocacy of the use of bricks. In an article in an early issue we pointed out ways in which they could help their own business by securing its circulation among the architects and builders of their locality, and we mentioned one thing in particular, - the substitution of brick for cornices where sheet metal or wood are more often used. We called attention to the fact that our publication of designs and details would suggest treatments in brick which would secure its use in place of other materials and, consequently, increase its sale. We refer to this here as we have just received a letter from Mr. L. L. Rand, an architect of Spokane, Wash., in which he says: "Your paper is one of the most valuable that comes to my office, and I have no comments to make, only of a favorable kind. We use a great deal of brick here, as our building stones are granites and hard to work. So far as the work of my own office is concerned, I can see the effects of your paper by the increased use of brick for trimmings and ornament when stone was formerly used,

with the result that the buildings are looking better, cleaner, and more satisfactory in every respect. We have bricks that ring like steel, and our manufactures of clay are very creditable."

If any evidence more directly in support of our argument could be produced, we do not know what it could be. This is only one instance. Why is it not quite as likely that THE BRICKBUILDER is exercising a similar influence in the office of every one of its subscribers, and increasing the sales of brick everywhere? There is not a brickmaker in the United States that could not get back in actual cash ten times the yearly subscription price, every month of the building season, by intelligently using the copies as they appear. There are a dozen ways in which this can be done, but the best way is to subscribe for a copy to be sent to each one of your customers among local builders. Special inducements will be made to brickmakers wishing to make a trial.

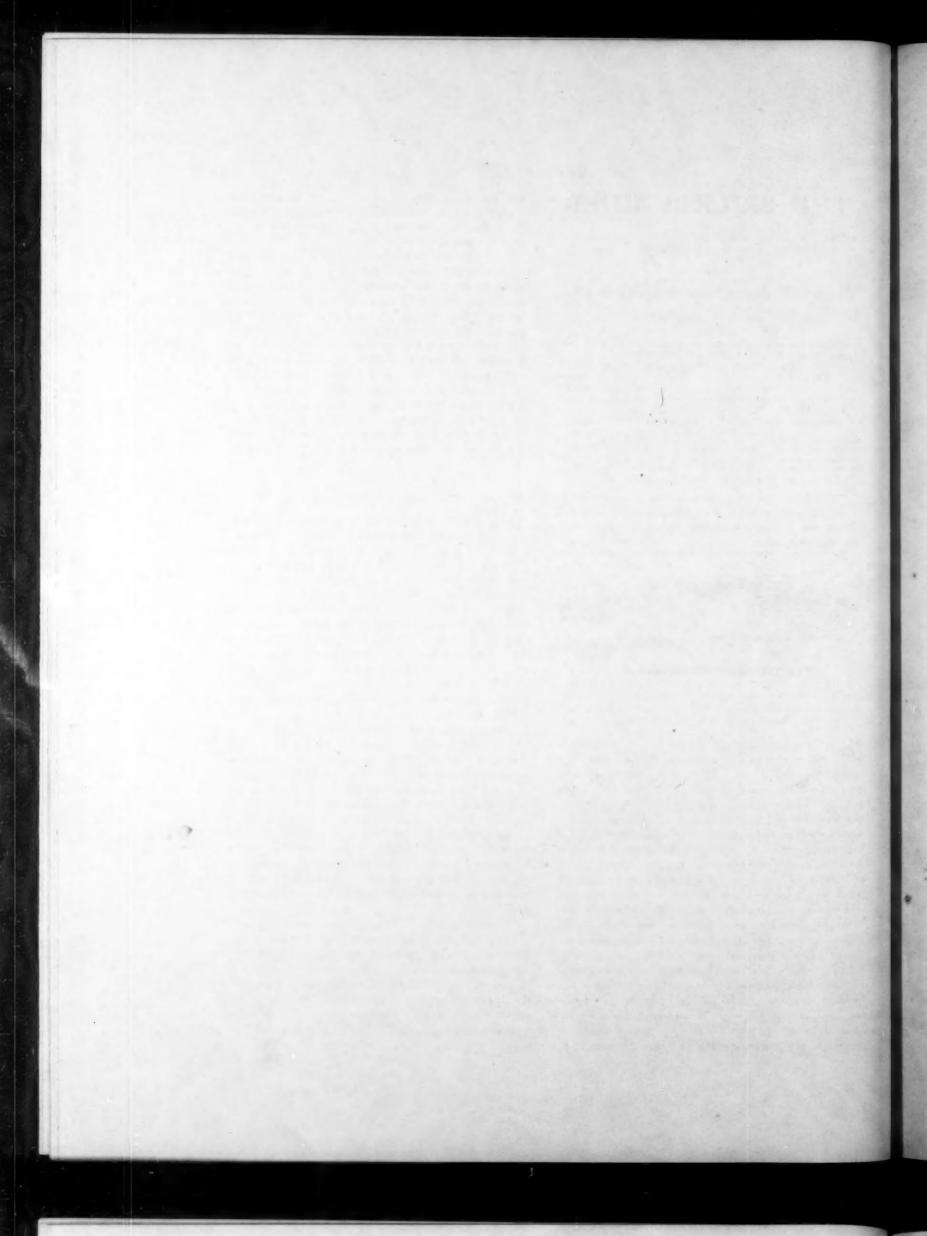
### AMERICAN AND FOREIGN BRICKWORK.

THE exhibits of brickwork as compared with those of the French Exposition of 1889, says the Builders' Gazette, are favorable to the American product so far as the brick are concerned. The arrangement of the brick and clay products in the Paris Exposition was generally more artistic as to design and color than is the case at Chicago, but as to the quality of the brick themselves, their general character and color, independent of arrangement in the structure, there can be no question. This information comes to us from one who is posted on the subject. There can be not the least question that the best brick made in the world to-day is an American product. There may be some exceptions to this in the way of specialties.

England has given more attention to the manufacture of enamelled brick than have we; and it is generally understood that in this particular they have been more successful, though there is nothing to be ashamed of in what has been done. It may be, and probably is, true that enamelled brick of a quality quite as good as those made any place is now being produced in this country.

However, this has not been done long enough, nor is the result so fully established that we can as yet claim to have superiority in this direction. It is only within very recent years that our attention, as brickmakers, has been generally and seriously directed to this branch of clay work.

In speaking of the designs in constructive brickwork as compared with those of the Paris Exposition of 1889, we refer to the little pavilions and exhibits shown at the two great fairs. In this respect, Chicago is at a great advantage; though we repeat, for the sake of clearness, the statement that the Old World has much to learn from us in the products themselves. It is in the artistic arrangement of brick that we have not been particularly happy.



### RAILROADS AND INDUSTRIAL ENTER-PRISES.

IT is a wise move on the part of certain rail-roads to make a strong effort to secure the location on their lines of manufacturing plants, and to further this the establishment of "Industrial Departments" under competent managers. Both the St. Paul and the Illinois Central have announcements in our advertising columns that will be of interest to those of our readers among the manufacturing class who are contemplating changing their location. Mr. George C. Power, at 58 Michigan Avenue, and Mr. Luis Jackson, at 160 Adams Street, Chicago, look after the industrial interests of the Illinois Central and of the St. Paul respectively.

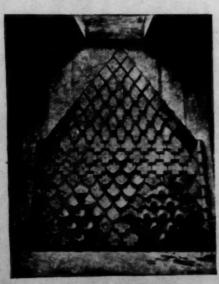
THE Cincinnati, Hamilton & Dayton R. R. have issued a handsome panoramic view, five feet long, of Chicago, and the World's Fair, showing relative heights of the principal buildings, etc., also a handsome photographic album of the World's Fair buildings, either of which will be sent to any address postpaid on receipt of ten cents in stamps. Address D. G. Edwards, General Passenger Agent World's Fair Route, 2900 Fourth Street, Cincinnati, O.

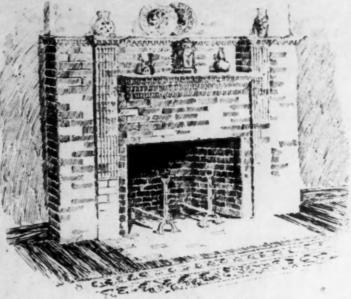
### THE CHICAGO SCHOOL OF ARCHITECTURE.

THE Armour Institute and the Art Institute combined, the former supplying scientific and mathematical instruction, the latter the artistic and technical, form a new school to be known as "The Chicago School of Architecture." It is intended to have it second to none in point of equipment or curriculum. The first term begins Sept. 14.

THE accompanying cut, from a photograph taken at the works, shows several forms of roofing tile manufactured by the Celadon Terra-Cotta Company, at Alfred Centre, N. Y.

This company is working to perfect a series of tiles which will not only be capable of artistic use, but be so cleverly designed mechanically as to make them interchangeable and watertight. Architects who do not know the work of the Celadon Company will do well to investigate.





THE above sketch for a brick mantel is the latest design by the Philadelphia & Boston Face Brick Company. It is intended for a sitting-room, and has the special advantage that its width may be increased or diminished to fit almost any position. In the case of chimney breasts already built this is a strong point. The fireplace opening is three feet six inches wide, two feet six inches high, and one foot eight inches deep. The shelf is four feet six inches from the floor, while the entire width, if built as shown in the sketch, is seven feet six inches. Bricks numbered 117, 105, 101, 101a, 101b, 101c, and 101d are used, and the cost of the material in red is \$41.35; in cream, \$62.00. The bricks are carefully packed, and working drawings with dimensions and full instructions are sent, so that any good mason can put up the mantel.

### AS OTHERS SEE US.

Louis Beezer, Architect, Altoona, Pa.: "Your journal is among the most welcome of the many that come to my office."

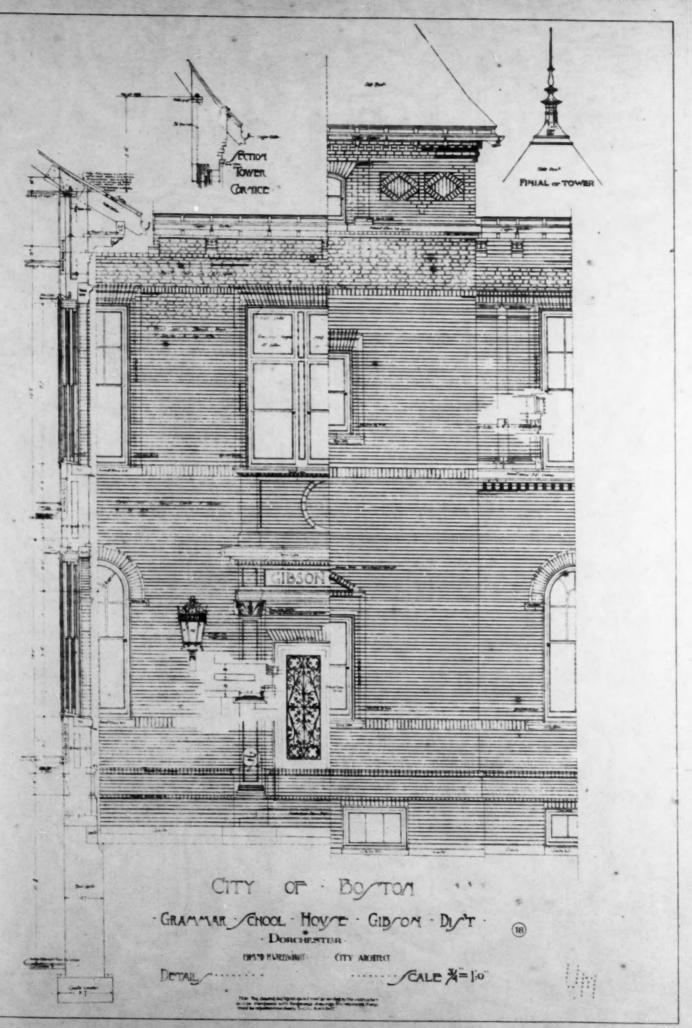
John J. Scanlan, Fennimore, Wis.: "Your paper is very interesting, and all contractors of building should take it."

A. Cameron, Architect, Salem, O.: "I am well pleased with THE BRICKBUILDER."

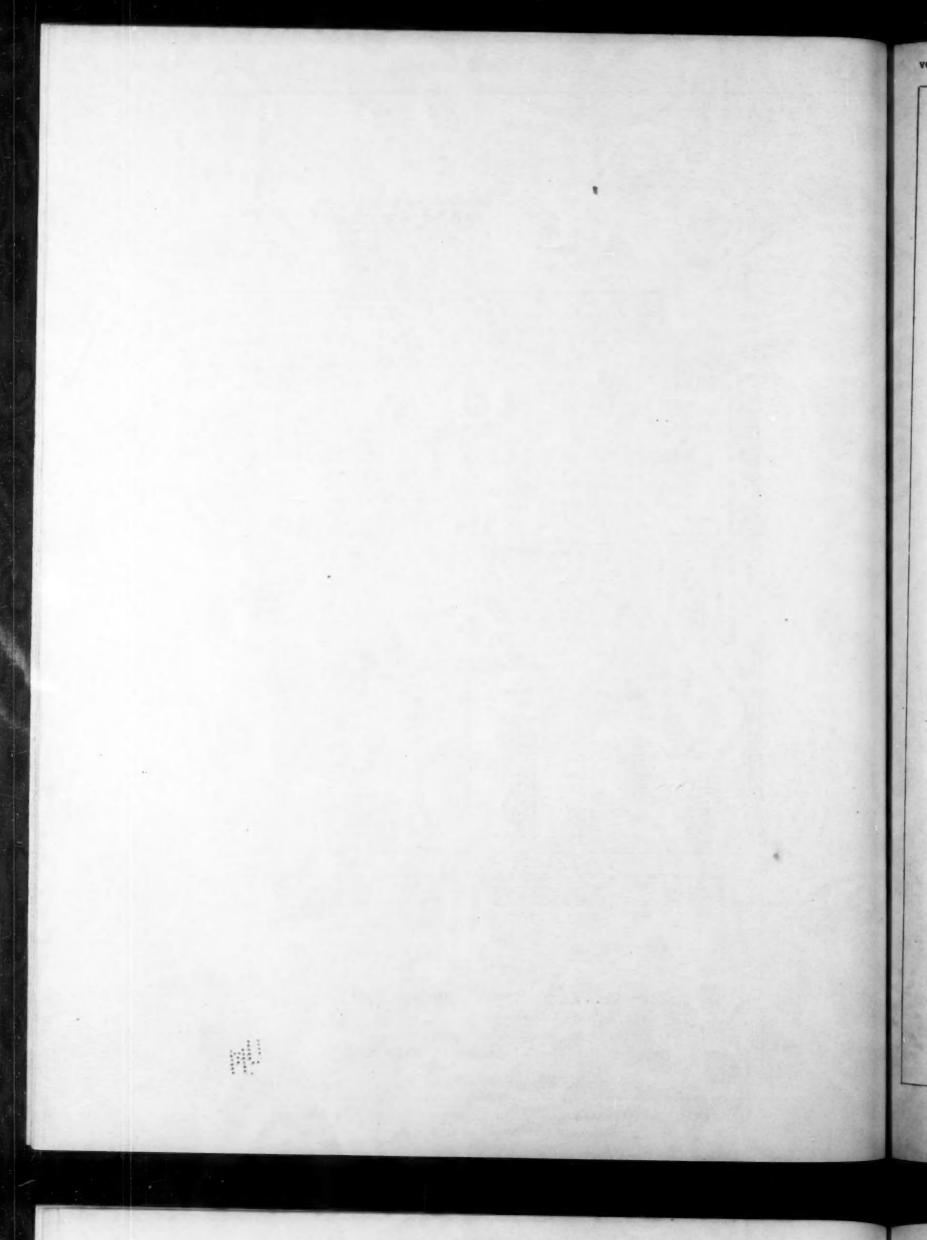
Herbert G. Paull, Architect, Toronto, Can.: "I value very highly THE BRICKBUILDER, and consider it probably the cheapest architectural publication brought out in America. I was looking over the whole of the numbers last week, and must express great satisfaction at the numerous good details introduced."

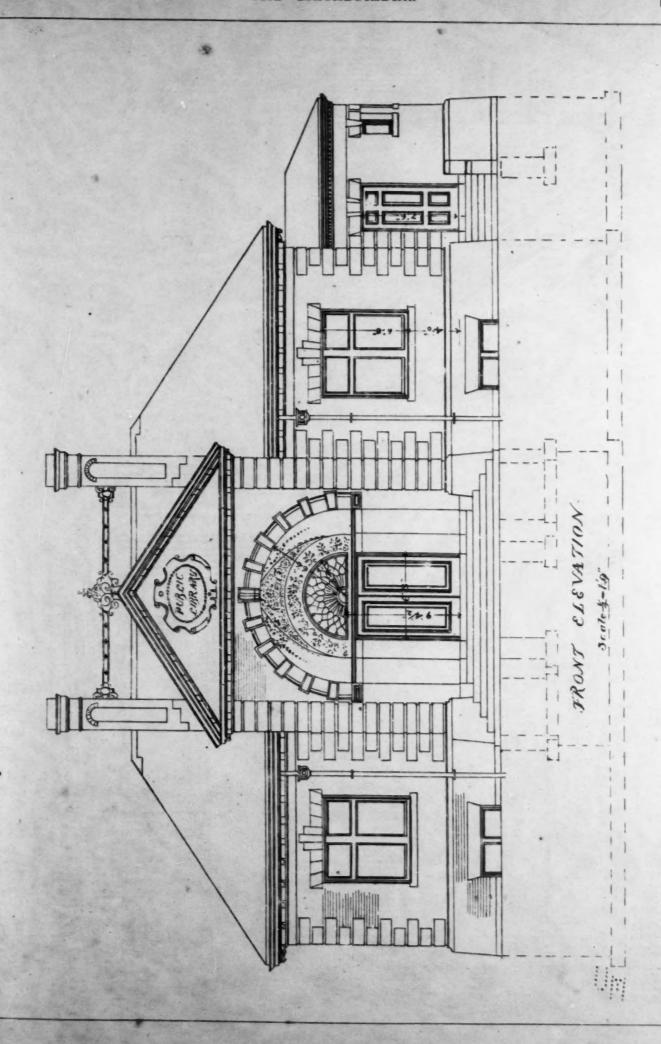
[It is only by looking through a complete volume that one can realize what a mass of useful material THE BRICK-BUILDER contains during a year. — ED.]

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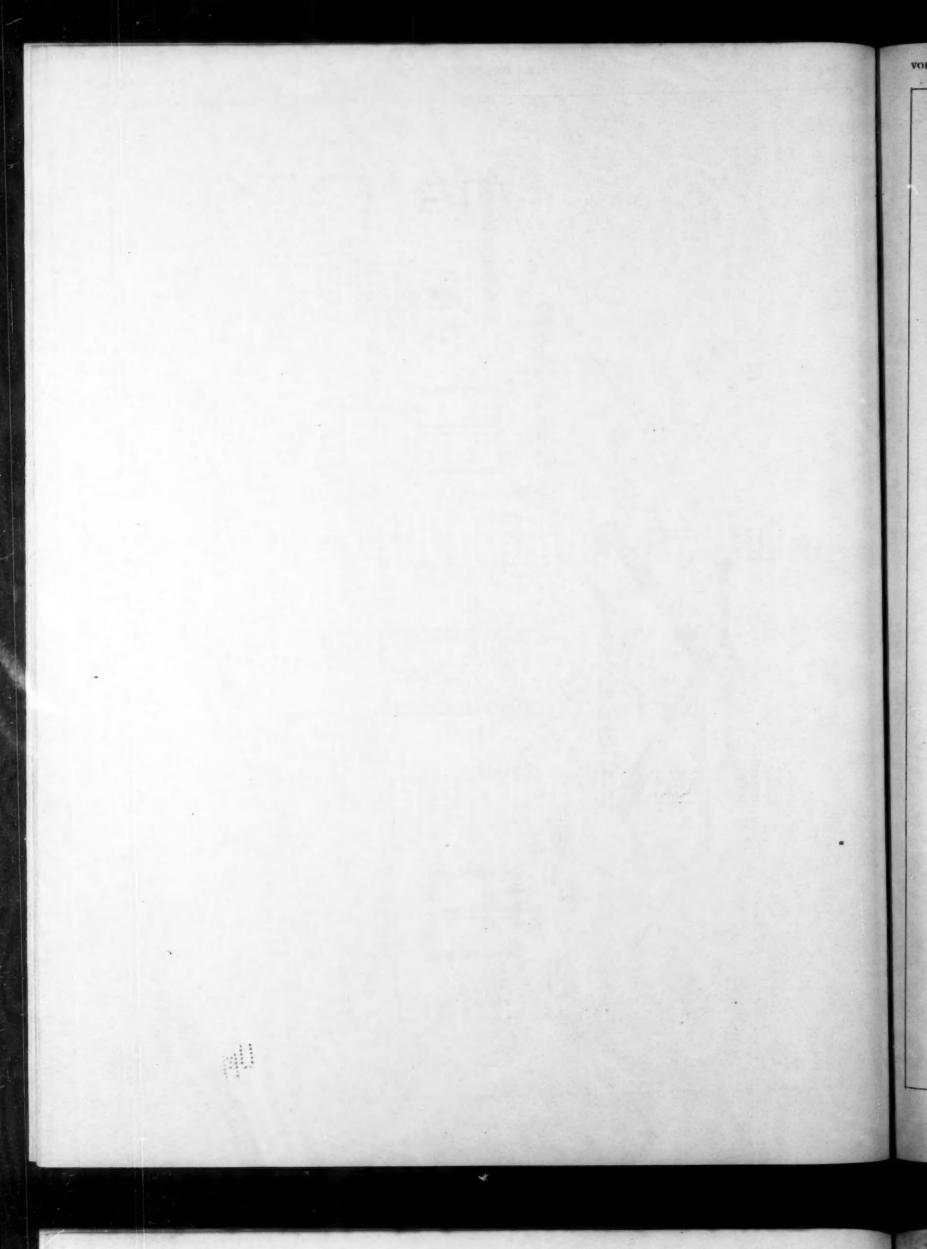


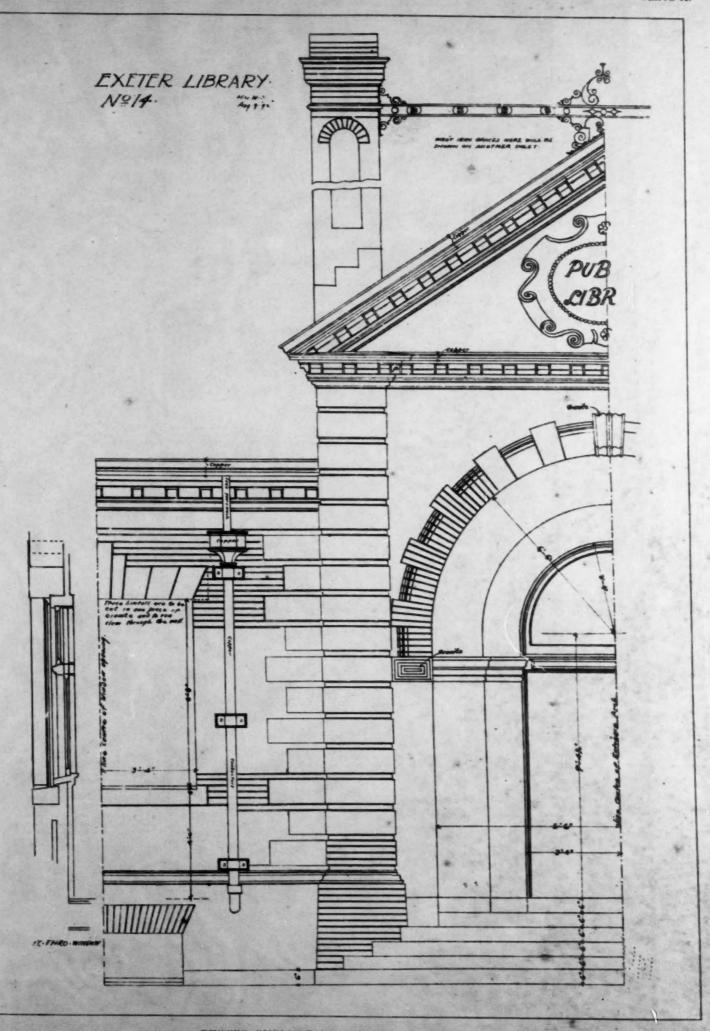
DETAILS OF GRAMMAR SCHOOL HOUSE, GIBSON DISTRICT, BOSTON.
EDMUND M. WHEELWRIGHT, CITY ARCHITECT.



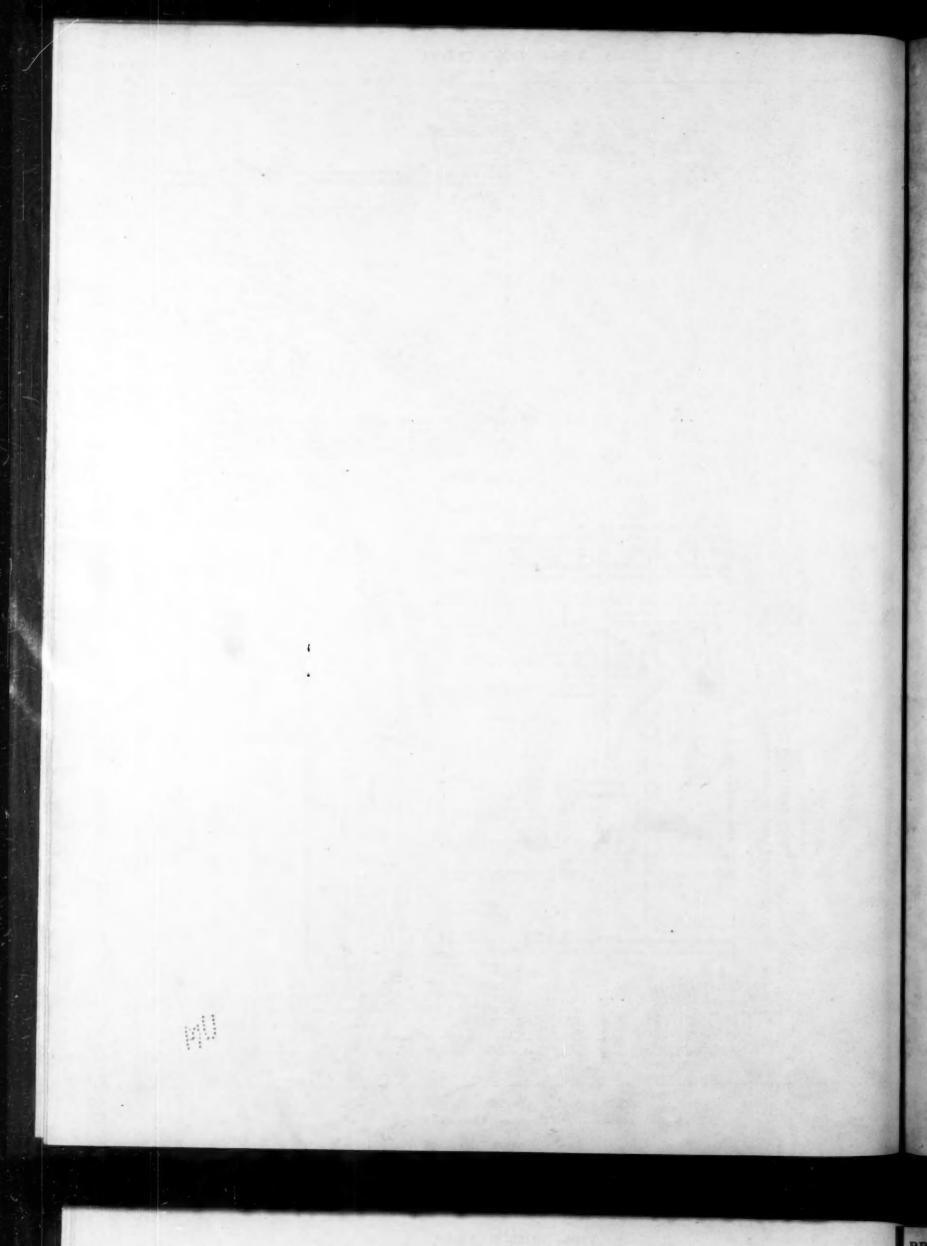


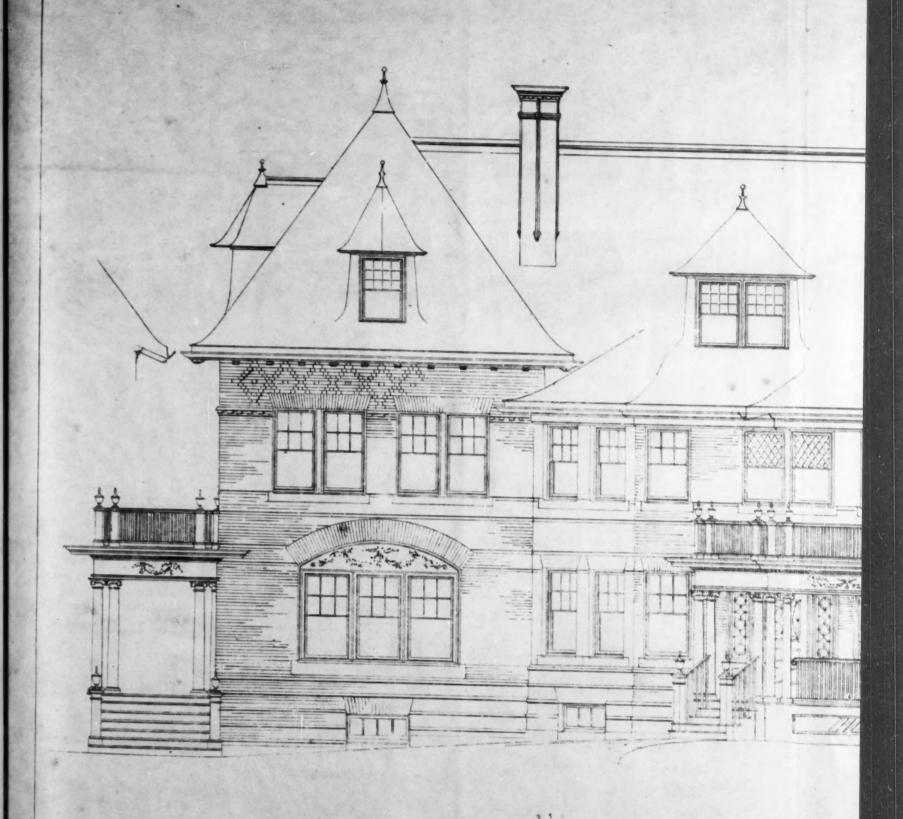
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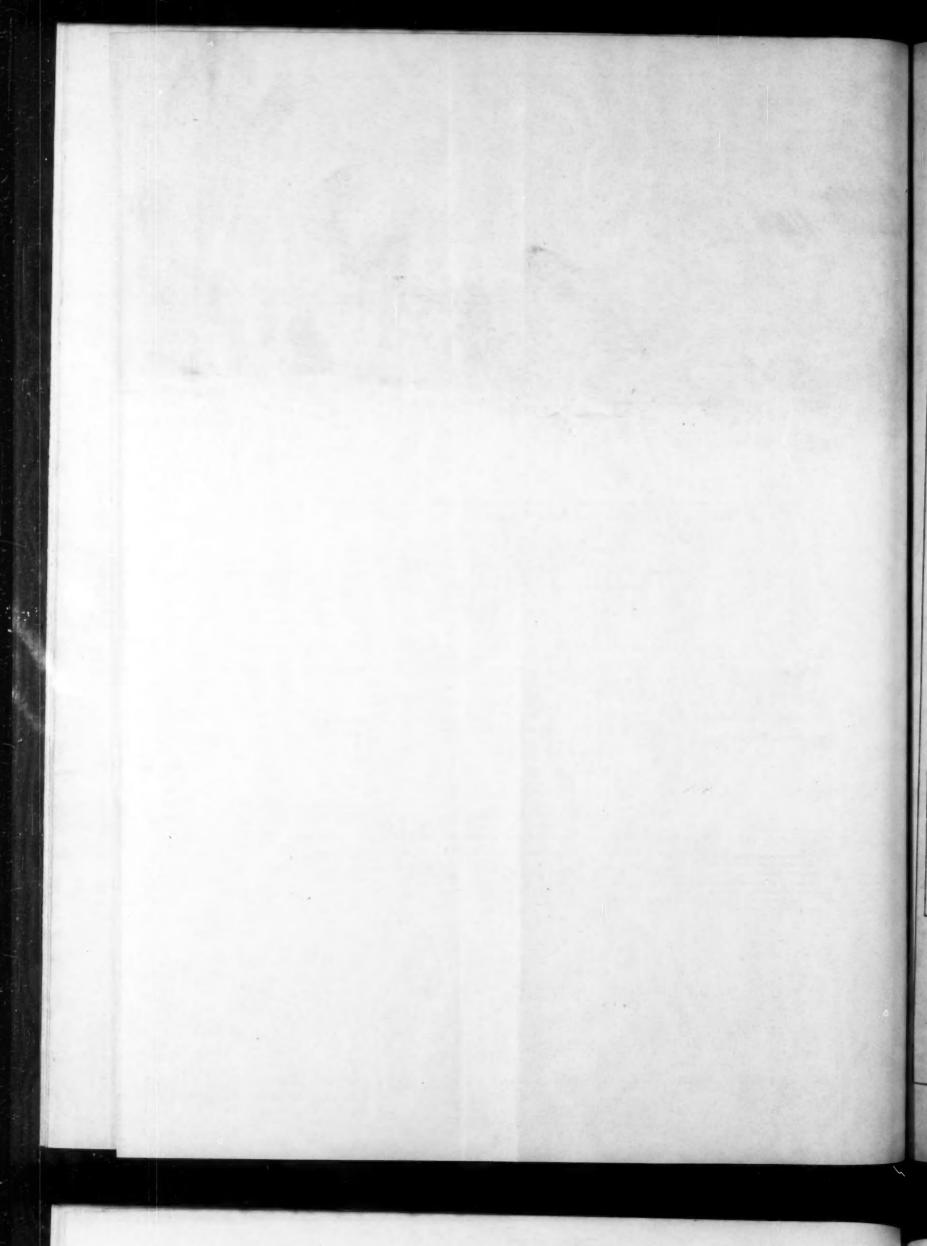
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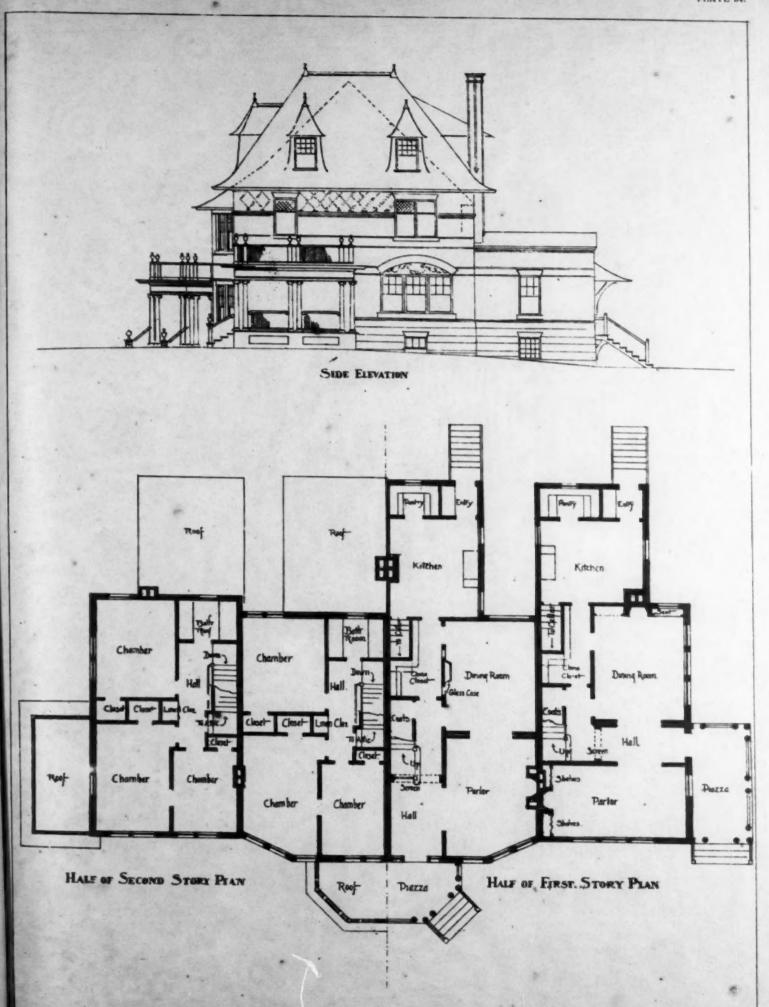






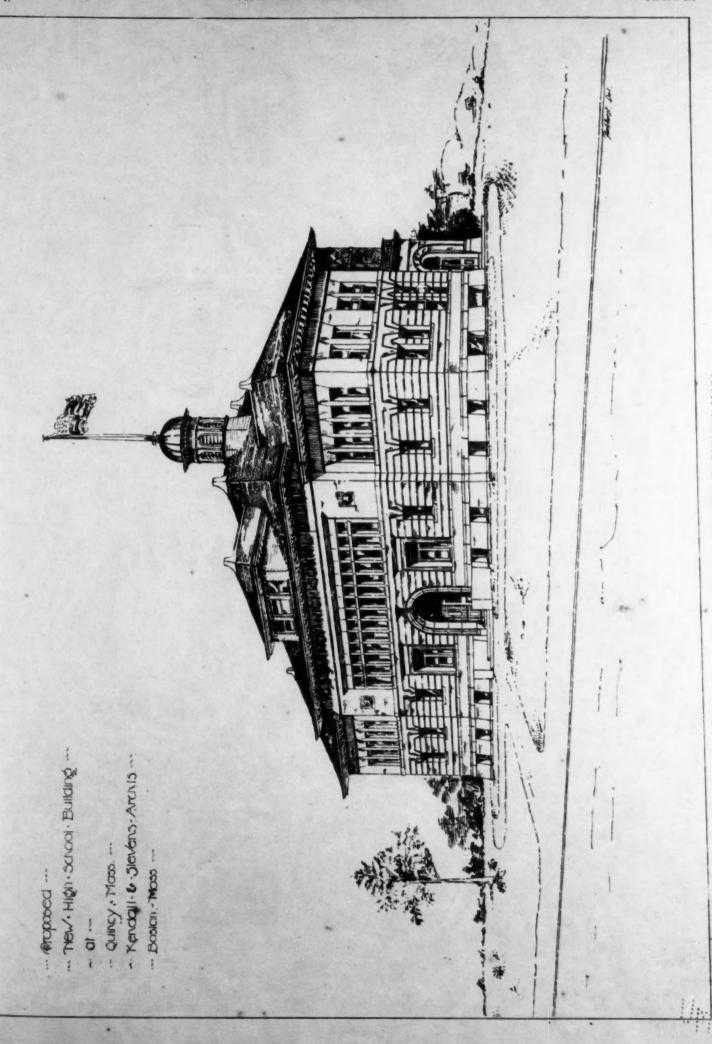
US FOR DR. H. E. MARION, BRIGHTON, MASS.
WARREN, ARCHITECT, BOSTON.





SIDE ELEVATION AND PLANS, HOUSES FOR DR. H. E. MARION, BRIGHTON.

L. O. WARREN, ARCHITECT, BOSTON.



DESIGN FOR SCHOOL HOUSE, QUINCY, MASS.
MESSER, KENDALL & STEVENS, ARCHITECTS, HOSTON.

